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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,376

09/27/2006

Moshe Malik

37706

7746

67801 7590 03/29/2011  
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EXAMINER

SHEARER, DANIEL R

ART UNIT

PAPER NUMBER

3754

MAIL DATE

DELIVERY MODE

03/29/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/599,376

Applicant(s)

MALIK ET AL.

Examiner

DANIEL R. SHEARER

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23,25,30 and 36-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23,25,30 and 36-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Paper No(s)/Mail Date: 5/1/2010; 5/5/2010; 5/23/2010; 5/17/2010;

8/30/2010; 1/11/2010; 1/26/2010  
U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)

Office Action Summary

Part of Paper No./Mail Date 20110325

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 15 recites the limitation "flow generator pumps" in line 1 of the claim.

There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 6, 7, 9, 11, 16 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,826,048 to Skorka et al. (Skorka).

Skorka shows a hand held dispensing device (1), comprising a casing (29), a mixing chamber (Fig. 4), a port (5, 6) to receive two rigid containers (2), a pump (3) located between the mixing chamber and port (Fig. 1) and no tubes are external to the casing (Fig. 1).

Regarding claims 6 and 7, Skorka shows that the casing defines a recess (Fig. 1) to receive the containers and can be adapted to receive containers of a different size (can receive taller or shorter containers).

Regarding claims 9, 11 and 16, Skorka shows separate pumps for each of the chemicals (Fig. 1), the pumps pump the chemicals at different rates (Col. 5, ll. 56-63), and a nozzle (16).

6. Claims 36 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,302,832 to Hardman et al. (Hardman).

Hardman shows a dispensing device (Fig. 1), comprising a mixing chamber (92), a flow generator (54) and a removable base (16) including a motor (19) that does not come into contact with the chemicals (drill 16 only drives gears).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 4, 8-13, 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,388,761 to Langeman in view of U.S. Patent No. 6,383,572 to De Graaf et al. (De Graaf).

Langeman shows a plural component dispensing device (Fig. 2), comprising a casing (132, general teaching, Col. 8, ll. 34-40), a mixing chamber (84), a port (48A, 48B), two rigid containers (22A, 22B) with a plurality of chemicals that move with the casing, and separate flow generators/pumps (28A, 28B) for each chemical located between the mixing chamber and port. Langeman fails to show that no tubes are external to the casing.

De Graaf shows a plural component dispensing device (Fig. 1), comprising two containers (3, 14), a mixing chamber (18) and a flow generator (9) housed inside a casing (30) with no tubes external to the casing (Fig. 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the casing of Langeman to house all components of the dispenser with no external tubes as taught by De Graaf to protect the components and as an obvious design choice to improve the appearance of the device.

Regarding claim 8, Langeman as modified by De Graaf is silent with respect to the weight of the device. It would have been obvious to limit the weight of the device to less than 5 kilograms to increase portability especially since it has been held that making an old device portable or movable without producing any new and unexpected result involves only routine skill in the art. *In re Lindberg*, 93 USPQ 23 (1952)

Regarding claims 10 and 11, Langeman shows the flow generator including suction gears (24), and pumping the chemicals out of the containers at different rates (Col. 7, ll. 35-37).

Regarding claim 12, Langeman fails to specifically disclose the chemicals being pumped by the flow generator at a pressure above 5 atmospheres. However, Langeman discloses that it is known in the art to pump the chemicals at a pressure above 1000 psi or about 68 atmospheres to permit consistent impingement mixing in the spray gun (Col. 2, ll. 20-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have designed the device of Langeman as modified by De Graaf to pump the chemicals at a pressure above 5 atmospheres to permit consistent impingement mixing in the spray gun.

Regarding claims 13 and 16, Langeman shows two heaters (36A, 36B) to heat the chemicals in the containers and a nozzle (84, 26) that mixes and releases the chemicals to the environment.

Regarding claim 19, Langeman shows a solvent flushing system to remove foam components (Col. 9, ll. 47-50) from the spray gun (26) before they solidify so that the nozzle can inherently be used over a plurality of foam generating sessions.

2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view of De Graaf as applied to claim 1 above and further in view of U.S. Patent No. 5,526,957 to Brown et al. (Brown '957).

The Langeman-De Graaf combination shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the one or more containers comprising a single container with a plurality of compartments. However, Brown '957 shows a foam dispensing device (10) with a single container (26) holding foam

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generating components divided into two compartments (128, 130). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed the two containers of Langeman as modified by De Graaf as one container with two compartments as taught by Brown '957 in order to save space and material.

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view De Graaf as applied to claim 1 above and further in view of U.S. Patent No. 5,265,761 to Brown (Brown '761).

The Langeman-De Graaf combination shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the device including a heater to heat the chemicals flowing from the containers. However, Brown '761 shows a foam dispensing device (Fig. 1) with a heater to heat chemicals flowing from containers in order to reduce the amount of cold shot foam released (Col. 10, ll. 36-40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the hoses of Langeman as modified by De Graaf with the heaters of Brown '761 in order to reduce the amount of cold shot foam released.

4. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view De Graaf as applied to claim 1 above and further in view of U.S. Patent No. 4,568,003 to Sperry et al. (Sperry).

The Langeman-De Graaf combination shows all aspects of the applicant's invention as set forth in claims 1 and 16, but fails to disclose the mixing chamber being

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detachably attached to the casing or the nozzle comprising a material to which foam does not adhere. However, Sperry discloses a foam generating apparatus (Fig. 1) with a detachable mixing chamber (see abstract) comprising components made of a material to which foam does not adhere (Col. 2, ll. 55-60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the device of Langeman as modified by De Graaf with the detachable mixing chamber with non-stick components of Sperry to allow for easy replacement of parts (Col. 2, ll. 15-19) and allow for easy cleaning.

15. Claims 18, 19, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view De Graaf as applied to claim 1 above and further in view of U.S. Patent No. 5,938,079 to Wacker et al. (Wacker).

The Langeman-De Graaf combination shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the nozzle and mixing chamber having flexible walls and being expanded from a zero volume when the flow generator is not operating to a larger volume by the pressure of chemical streams when the flow generator is operating. Wacker shows a foam dispensing device (Fig. 1) with two containers (12, 13) including a plurality of chemicals (see abstract), a pump (30, 21) for each container, and a nozzle (30) that includes a mixing chamber (89) with flexible walls (98) that are expanded from a substantially zero volume (Fig. 8) when the pump is not operating to a larger volume (Fig. 7) when the pump is operating to prevent the undesired dribble or drip of residual foam product (Col. 3, ll. 5-20). It would have been



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obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the foam dispensing device of Langeman as modified by De Graaf with the nozzle of Wacker to prevent any undesired dribble or drip of residual foam product.

16. Claims 18, 19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view De Graaf as applied to claim 1 above and further in view of FR 2416718 to Viellard.

The Langeman-De Graaf combination shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the nozzle and mixing chamber having flexible walls and being expanded by the pressure of streams of chemicals from a zero volume when the flow generator is not operating to a larger volume by the pressure of chemical streams when the flow generator is operating. Viellard shows a dispensing device (Fig. 1) with two containers (1, 2) including a plurality of chemicals (Pg. 1 of translation, Paragraph 2), a flow generator (11, 12) for each container, and a nozzle (31) that includes a mixing chamber (42, 43, 47) with flexible walls (41, 42) that are expanded by the pressure of streams of chemicals from a substantially zero volume when the flow generator is not operating to a larger volume when the flow generator is operating (Pg. 3 of translation). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the foam dispensing device of Langeman as modified by De Graaf with the nozzle of Viellard to improve the mixing of the chemicals (Pg. 3 of translation).

17. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view De Graaf as applied to claim 1 above and further in view of U.S. Patent No. 4,262,848 to Chabria.

The Langeman-De Graaf combination shows all aspects of the applicant's invention as set forth in claim 16, but fails to disclose that the walls of the nozzle are flexible. However, Chabria discloses a foam dispensing device (1) with a flexible nozzle extension (70) to allow for dispensing of foam to areas not accessible by the gun (Col. 5, ll. 38-41). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the Langeman as modified by De Graaf with the flexible nozzle extension of Chabria to allow for dispensing of foam to areas not accessible by a dispensing gun.

18. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view De Graaf as applied to claim 1 above and further in view of U.S. Patent No. 4,154,368 to Gusmer et al. (Gusmer).

The Langeman-De Graaf combination shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the pusher to push the chemicals in the container toward an exit of the container. However, Gusmer discloses a foam dispensing device comprising two containers (1, 3) with foam generating chemicals and pushers in the form of pressurized nitrogen (5, 7) to ensure that the liquids will leave their containers with a small positive pressure (Col. 2, ll. 12-16). It would have been

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obvious to one having ordinary skill in the art at the time the invention was made to have provided the containers of Langeman as modified by De Graaf with the pusher in the form of pressurized nitrogen of Gusmer to ensure that the liquids will leave their containers with a small positive pressure.

9. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,981,909 to Freeman in view of U.S. Patent No. 6,558,059 to Hillinger et al. (Hillinger).

Freeman shows a base (10), comprising a niche (14) for receiving a dispensing device (21), a compartment (24) for receiving a container (28) and a heater (22) adapted to heat the contents of the container (Col. 3, ll. 32-40). Freeman fails to show a battery charger. Hillinger shows a base (104) comprising a niche (within 104) for receiving a dispensing device (100) and a battery charger (110) to charge the battery (102) of the dispensing device in the niche. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the base of Freeman with a battery charger as taught by Hillinger to improve efficiency by allowing for simultaneous heating of the containers and charging of a battery of a dispensing device.

10. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hardman in view of U.S. Patent No. 4,974,752 to Sirek.

Hardman shows all aspects of the applicant's invention as set forth in claim 36, but fails to show a heater. Sirek dispensing device (Fig. 1) with a flow generator (29) a container (19) of material and a heater (37) to allow for use during the winter months (Col. 1, ll. 12-19). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the base of Hardman with heater as taught by Sirek to allow for use during the winter months.

11. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,755,269 to Venooker et al. (Venooker) in view of Sperry.

Venooker shows a container (Fig. 1) comprising a container (40), a port (44) covered by a diaphragm (Fig. 6) and adapted to receive a tube (54), wherein the diaphragm prevents flow from the container when a tube is not in the port (Fig. 6) and prevents dripping outside the tube when the tube is in the port (Fig. 5). Venooker is silent with respect to the contents of the container. Sperry discloses a container (114) for holding polymeric isocyanate (Col. 4, ll. 30-35). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted the polymeric isocyanate of Sperry for the unknown fluid of Venooker to allow for use in generating foam and since it would have produced predictable results, namely storage of the polymeric isocyanate.

Regarding claim 40, Venooker is silent with respect to the size of the container, however it would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the container of Venooker with a volume

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less than 5 liters since it has been held that changes in size of a device involves only routine skill in the art. See MPEP 2144.04.

### ***Response to Arguments***

12. Applicant's arguments filed 7/12/2010, with respect to the rejection(s) of claim(s) 30, 36 and 39 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as discussed above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL R. SHEARER whose telephone number is (571)270-7416. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571)272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. R. S./  
Examiner, Art Unit 3754

/Kevin P. Shaver/  
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